

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	6006	(curve adj fitting)	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/12 16:50
S2	0	S1 and (finite adj mesh)	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/12 16:50
S3	92	S1 and (finite adj element)	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/12 16:50
S4	16	S3 and mesh	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/12 16:52
S5	0	S4 and simplices	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/12 16:53
S6	4	S1 and simplices	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/12 16:57
S7	8	(finite adj element adj mesh) and simplices	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/05/12 17:10
S8	3	((("6674432") or ("6313837") or ("6018497")).PN.	USPAT	OR	OFF	2005/05/12 17:11

[Industry Search](#)

[eLibrary Search](#)

SPE E&P Industry Search

SPE's Industry Search engine allows you to search E&P-related sites across the web. Enter text or keywords (including technical terminology) to describe your request, such as:

- Benefits of synthetic drilling fluid in offshore wells
- Use of nitrogen in hydraulic fracturing
- Production technologies or processes for tight gas formations or reservoirs

Avoid using numbers (see [FAQ](#)). For specific SPE papers, use [eLibrary Search](#).

finite element mesh simplices

[Search](#) [Help](#) [FAQs](#)

Information Sources

☒ SPE ☒ eLibrary ☒ Industry

File Types

☒ web/html ☒ pdf ☒ doc ☒ ppt ☒ xls

Search Results

Relevance

Results 1-25 of about 199

[Next](#)

92%



Control-Volume Finite-Element Two-Phase Flow Experiments with Fractured Rock Represented by Unstructured 3D Hybrid Meshes

SPE eLibrary Control-Volume Finite-Element Two-Phase Flow Experiments with Fractured Rock Represented by Unstructured 3D Hybrid Meshes 00093341 We represent intersecting natural and stochastically generated fractures in massive or layered porous rocks accurately with novel unstructured hybrid finite-element meshes. Governing Equations We use a combined dual mesh node-centered control-volume finite-element (CVFE) method23-24 extended by us to hybrid element meshes22,25 to solve pressure and transport equations.

92%



Simplified Finite-Element Models for Reservoir Flow Problems

SPE eLibrary Simplified Finite-Element Models for Reservoir Flow Problems 00007196 There remains the aspect of modeling flexibility; this paper summarizes research conducted to construct finite-element models that realize this advantage, while preserving the stability and computational simplicity of conventional finite-difference models. In the present context, the finite-element method is applied as an alternative to finite differences for spatial discretization. Hence, most methods used in finite-difference models for Steps 2 through 4 may be adapted to such finite-element models.

92%



Numerical Simulation of Water Injection in 2D Fractured Media Using Discrete-Fracture Model

SPE eLibrary These authors used finite element formulation to simulate 2D single-phase flow through fractured porous media. The main advantage of the finite element method in reservoir simulation is the possibility to discretize a geometrically-complex reservoir with an optimal use of mesh points. The standard finite element approach is more complicated than the finite difference method and numerically less efficient. In this work, we use a Galerkin variational method with the finite element discretization.

92%



Transient Finite Element Code: A Versatile Tool for Well Performance Analyses

SPE eLibrary Infinite series, numerical Laplace conversions, finite element, finite difference, and boundary elements are normally used for solving diffusivity equations. Most finite difference formulas can also be derived from the finite element procedure. The boundary element method can be formulated starting with the same theory as the finite element method, hence, they are basically similar. Mesh Generation Routine